Amendments to the Written Description

Please replace the last paragraph on page 3, beginning line 20, and ending on page 4, line 2, with the following paragraph:

Preferred embodiments of the present invention include methods and compositions for the measurement of endothelial cytokines induced by glycated protein-induced inflammation. More preferred assays measure determinants such as, but not limited to, ~~NF-•B~~ NF-κB, ~~IL-1• (interleukin 1•)~~ IL-1β (interleukin 1β), IL-11 (interleukin 11), m-CSF (macrophage colony stimulating factor), fibrinogen, ~~TNF-• (tumor necrosis factor •)~~ TNF-α (tumor necrosis factor α), adhesion molecules, selectins, VCAM-1 (Vascular Cell Adhesion Molecule-1), CRP (C-reactive protein), and PAI-1 (plasminogen activator inhibitor-1). Most preferred cytokines include IL-6 and monocyte chemoattractant protein 1 (MCP-1). These assays provide for rapid and accurate high throughput screening of molecules that block or inhibit glycated protein-induced inflammation. The identification of these effector molecules and compounds leads to effective therapies for treatment of pathologies resulting from the biological effects of AGE and glycated protein accumulations and interactions.

Please replace the second paragraph on page 9, which begins at line 19 and ends at line 33, with the following paragraph:

The present invention is useful in determining which compounds or molecules are active in inhibiting inflammation or cell activation by glycated proteins or AGE. AGE increases lipoprotein oxidizability and atherogenicity. Not wishing to be bound by any particular theory, it is thought that AGE binds to matrix proteins, induces synthesis of IL-1, ~~TNF•~~ TNFα, VCAM-1, Heme oxygenase, insulin like growth factor and IL-6, and activates ~~NF-•B~~ NF-κB. Pharmacological inhibition of AGE-induced cell activation may provide the basis for therapeutic intervention in many diseases, most notably in diabetic complications and Alzheimer's disease.

Therapeutic approaches for inhibition of AGE-induced inflammation include, but are not limited to, blocking the glycation of proteins, blocking AGE interactions with receptors and blocking AGE-induced signaling or signaling-associated inflammatory responses.

Please replace the first full paragraph on Page 6, which begins at line 6 and ends at line 21, with the following paragraph:

Preferred embodiments of the present invention comprise methods for screening for compounds that block glycated protein-induced inflammation. More preferred embodiments comprise methods for screening for inhibitory compounds or molecules that comprise addition of such compounds to assays for measuring inflammatory determinants, such as inflammatory cytokines, and determining the inhibitory effects of the compound. Most preferred embodiments comprise methods comprising assays wherein glycated albumin stimulates endothelial production of determinants, particularly determinants of inflammation such as IL-6, MCP-1, ~~IL1-~~ IL1-β, ~~TNF-~~ TNF-α, CRP, PAI-1, VCAM-1, ICAM-1, selectins, and adhesion molecules. The endothelial cell is important in inflammation reactions, and the methods and compositions described herein provide for high throughput screening of molecules that block glycated protein-induced inflammation.